EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

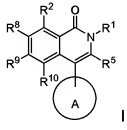
2. Authorization for this examiner's amendment was given in a telephone interview with Ms. Heidi Struse on December 17, 2009.

3. The application has been amended as follows:

A. Claim 7 (currently amended) has been amended to read as follows:

--Claim 7 (Currently Amended)

A compound of the structure:



I

or a pharmaceutically acceptable salt, crystal form, or hydrate, wherein:
A is

a) an aryl ring, wherein any stable aryl ring atom is independently unsubstituted or substituted with

1) halogen,
2) NO_2,
3) CN,
4) $CR^{46}=C(R^{47}R^{48})_2$,
5) $C\equiv CR^{46}$,
6) $(CR^{i}R^{j})_rOR^{46}$,

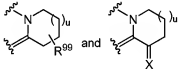
7) $(CR^iR^j)_rN(R^{46}R^{47})$,
8) $(CR^iR^j)_rC(O)R^{46}$,
9) $(CR^iR^j)_rC(O)OR^{46}$,
10) $(CR^iR^j)_rR^{46}$,
11) $(CR^iR^j)_rS(O)_{0-2}R^{61}$,
12) $(CR^iR^j)_rS(O)_{0-2}N(R^{46}R^{47})$,
13) $OS(O)_{0-2}R^{61}$,
14) $N(R^{46})C(O)R^{47}$,
15) $N(R^{46})S(O)_{0-2}R^{61}$,
16) $(CR^iR^j)_rN(R^{46})R^{61}$,
17) $(CR^iR^j)_rN(R^{46})R^{61}OR^{47}$,
18) $(CR^iR^j)_rN(R^{46})(CR^kR^l)_SC(O)N(R^{47}R^{48})$,
19) $N(R^{46})(CR^iR^j)_rR^{61}$,
20) $N(R^{46})(CR^iR^j)_rN(R^{47}R^{48})$,
21) $(CR^iR^j)_rC(O)N(R^{47}R^{48})$, or
22) oxo, or

b) a heteroaryl ring selected from the group consisting of
a 5-membered unsaturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting or N, O or S,
a 6-membered unsaturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting N, O and S, and
a 9- or 10-membered unsaturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting or N, O or S;

wherein any stable S heteroaryl ring atom is unsubstituted or mono- or di-substituted with oxo, and any stable C or N heteroaryl ring atom is independently unsubstituted or substituted with
1) halogen,
2) NO_2,
3) CN,
4) $CR^{46}=C(R^{47}R^{48})_2$,
5) $C\equiv CR^{46}$,
6) $(CR^iR^j)_rOR^{46}$,

7) $(CR^iR^j)_rN(R^{46}R^{47})$,
8) $(CR^iR^j)_r C(O)R^{46}$,
9) $(CR^iR^j)_r C(O)OR^{46}$,
10) $(CR^iR^j)_rR^{46}$,
11) $(CR^iR^j)_r S(O)_{0-2}R^{61}$,
12) $(CR^iR^j)_r S(O)_{0-2}N(R^{46}R^{47})$,
13) $OS(O)_{0-2}R^{61}$,
14) $N(R^{46})C(O)R^{47}$,
15) $N(R^{46})S(O)_{0-2}R^{61}$,
16) $(CR^iR^j)_rN(R^{46})R^{61}$,
17) $(CR^iR^j)_rN(R^{46})R^{61}OR^{47}$,
18) $(CR^iR^j)_rN(R^{46})(CR^kR^l)_SC(O)N(R^{47}R^{48})$,
19) $N(R^{46})(CR^iR^j)_rR^{61}$,
20) $N(R^{46})(CR^iR^j)_rN(R^{47}R^{48})$,
21) $(CR^iR^j)_rC(O)N(R^{47}R^{48})$, or
22) oxo;

R^1 and R^5 together with the atoms to which they are attached, form a ring selected from the group of structures consisting of



where u is 0 or 1, R^{99} is hydrogen or -OH, and X is O or =NOH;

R^2, R^8, R^9 and R^{10} are independently selected from:

1) hydrogen,
2) halogen,
3) NO_2,
4) CN,
5) $CR^{43}=C(R^{44}R^{45})$,
6) $C\equiv CR^{43}$,
7) $(CR^eR^f)_pOR^{43}$,
8) $(CR^eR^f)_pN(R^{43}R^{44})$,

9) $(CR^eR^f)_pC(O)R^{43}$,
10) $(CR^eR^f)_pC(O)OR^{43}$,
11) $(CR^eR^f)_pR^{43}$,
12) $(CR^eR^f)_pS(O)_{0-2}R^{60}$,
13) $(CR^eR^f)_pS(O)_{0-2}N(R^{43}R^{44})$,
14) $OS(O)_{0-2}R^{60}$,
15) $N(R^{43})C(O)R^{44}$,
16) $N(R^{43})S(O)_{0-2}R^{60}$,
17) $(CR^eR^f)_pN(R^{43})R^{60}$,
18) $(CR^eR^f)_pN(R^{43})R^{60}OR^{44}$,
19) $(CR^eR^f)_pN(R^{43})(CR^gR^h)_qC(O)N(R^{44}R^{45})$,
20) $N(R^{43})(CR^eR^f)_pR^{60}$,
21) $N(R^{43})(CR^eR^f)_pN(R^{44}R^{45})$, and
22) $(CR^eR^f)_pC(O)N(R^{43}R^{44})$,

or R^2 and R^8 are independently as defined above, and R^9 and R^{10}, together with the atoms to which they are attached, form the ring  , where R^m is C_{1-6}alkyl;

R^a, R^b, R^c, R^d, R^e, R^f, R^g, R^h, R^i, R^j, R^k, and R^l are independently selected from the group consisting of:

1) hydrogen,
2) C_1-C_6 alkyl,
3) halogen,
4) aryl,
5) R^{80},
6) C_3-C_{10} cycloalkyl, and
7) OR^4,

said alkyl, aryl, and cycloalkyl being unsubstituted, monosubstituted with R^7, disubstituted with R^7 and R^{15}, trisubstituted with R^7, R^{15} and R^{16}, or tetrasubstituted with R^7, R^{15}, R^{16} and R^{17};

R^4, R^{40}, R^{41}, R^{42}, R^{43}, R^{44}, R^{45}, R^{46}, R^{47}, R^{48}, R^{49}, R^{50}, R^{51}, R^{52}, and R^{53} and are independently selected from the group consisting of

1) hydrogen,
2) C_1-C_6 alkyl,
3) C_3-C_{10} cycloalkyl,
4) aryl,
5) R^{81},
6) CF_3,
7) C_2-C_6 alkenyl, and
8) C_2-C_6 alkynyl,

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with R^{18}, di-substituted with R^{18} and R^{19}, tri-substituted with R^{18}, R^{19} and R^{20}, or tetra-substituted with R^{18}, R^{19}, R^{20} and R^{21};

R^6, R^{60}, R^{61}, R^{62} and R^{63} are independently selected from the group consisting of

1) C_1-C_6 alkyl,
2) aryl,
3) R^{83}, and
4) C_3-C_{10} cycloalkyl;

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with R^{26}, di-substituted with R^{26} and R^{27}, tri-substituted with R^{26}, R^{27} and R^{28}, or tetra-substituted with R^{26}, R^{27}, R^{28} and R^{29};

R^7, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22}, R^{23}, R^{24}, R^{25}, R^{26}, R^{27}, R^{28}, and R^{29} are independently selected from the group consisting of

1) C_1-C_6 alkyl,
2) halogen,
3) OR^{51},
4) CF_3,
5) aryl,
6) C_3-C_{10} cycloalkyl,
7) R^{84},
8) $S(O)_{0\text{-}2}N(R^{51}R^{52})$,
9) $C(O)OR^{51}$,

10) $C(O)R^{51}$,
11) CN,
12) $C(O)N(R^{51}R^{52})$,
13) $N(R^{51})C(O)R^{52}$,
14) $S(O)_{0-2}R^{63}$,
15) NO_2, and
16) $N(R^{51}R^{52})$;

R^{80}, R^{81}, R^{82}, R^{83} and R^{84} are independently selected from a group of unsubstituted or substituted heterocyclic rings consisting of a 4-6 membered unsaturated or saturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting N, O and S, and a 9- or 10-membered unsaturated or saturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting or N, O or S; and n, p, q, r, and s are independently 0, 1, 2, 3, 4, 5 or 6;
provided that
when R^9 is OCH_3, R^1 is CH_3 and R^5 is $C(CH_3)_3$, then A is substituted,
when R^9 is hydrogen, R^1 is CH_3, and R^5 is hydrogen, then A is substituted,
when R^9 is hydrogen, R^1 is CH_3, and R^5 is $C(CH_3)_3$, then A is substituted, provided the substituent is not CH_3, and
when R^9 is OCH_3, R^1 is CH_3, R^5 is CH_3, then A is substituted;
wherein the compound, or a pharmaceutically acceptable salt thereof, is 11-(3-fluorophenyl)-9-methoxy-3,4-dihydro-2H-pyrido[1,2-b]isoquinoline-1,6-dione.--.

B. Claims 8, 12-18, and 22 have been canceled.

C. Claim 9 has been amended to read as follows:

--9. (Currently amended) A method of treating a condition in a mammal, the treatment of which is effected or facilitated by $K_v1.5$ inhibition, which comprises administering a compound of Claim 7 in an amount that is effective at inhibiting $K_v1.5$ wherein the condition is cardiac arrhythmia.--

D. At claim 21, line 2, the phrase "a compound of claim 1" has been amended to read as -- a compound of claim 7--.

E. At claim 23, lines 2 and 3, the phrase "a compound of claim 1" has been amended to read as -- a compound of claim 7--.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

4. Based upon the response filed August 18, 2009, the rejection under 35 U.S.C. 102(b) based upon Natsugari et al. is withdrawn.

5. Applicants preserve the right to file divisional applications drawn to the non-elected subject matter.

6. Claims 7, 21, and 23 have been amended to improve the clarity.

7. Non-elected claims 8-11 and 23 are rejoined with the invention of Group I.

8. The Information Disclosure Statement filed October 31, 2008 has been updated to include the publication dates.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zinna N. Davis whose telephone number is 571-272-0682.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12.18.2009